CLAIMS

I/We claim:

[c1]   1.   A method in a server system for providing information relating to a business application, the method comprising:

receiving a request to execute a command of a business application along with an indication of user interface elements to return;

executing the command of the business application to generate data elements;

generating the user interface elements to be returned; and

sending a response that includes the generated user interface elements and generated data elements.

[c2]   2.   The method of claim 1 wherein the request indicates a type of user interface element to return.

[c3]   3.   The method of claim 1 wherein the request indicates a type of user interface element to not return.

[c4]   4.   The method of claim 3 wherein the type of user interface element not to return is navigation data.

[c5]   5.   The method of claim 1 wherein the request includes a "SWEDataOnly" argument.

[c6]   6.   The method of claim 1 wherein the request includes a "SWEExclude" argument.

[c7]   7.   The method of claim 1 wherein the request is to execute a predefined query that was identified to the client system when a request for a list a predefined queries was received from the client system.

[c8]   8.   A method in a server system for providing information relating to a business application, the method comprising:

> providing transforms for transforming output of the business application, each transform having a name;
>
> receiving from a client system a request to execute a command of a business application, the request optionally indicating the name of a transform to be applied to the output of the business application;
>
> executing the command of the business application to generate output;
>
> when the request indicates the name of a transform,
>
>> applying the provided transform with the indicated name to the generated output to generate transformed output; and
>>
>> sending to the client system the transformed output; and
>
> when the request does not indicate the name of a transform, sending to the client system the generated output.

[c9]   9.   The method of claim 8 wherein the generated output is in XML format and the provided transforms are XSLT stylesheets.

[c10]   10.   The method of claim 8 wherein the request includes a "SWEXslStyleSheet" argument.

[c11]   11.   A method in a server system for providing information relating to a business application, the method comprising:

> providing a default format for output of the business application;
>
> receiving from a client system a request to execute a command of a business application, the request optionally indicating a user agent

format or a client-specified format for the output of the business application;

selecting a format giving preference in the following order: the client-specified format, the user-agent format, and the default format;

executing the command of the business application to generate output; and

sending to the client system the generated output in the selected format.

[c12]   12.   The method of claim 11 wherein the user-agent format is selected over the default format in accordance with a predefined preference of formats.

[c13]   13.   The method of claim 11 wherein the user-agent format is based on type of user agent specified in the request.

[c14]   14.   The method of claim 13 wherein the type of user agent specifies a type of browser.

[c15]   15.   The method of claim 11 wherein the formats are a markup language.

[c16]   16.   The method of claim 15 wherein one of the formats is HTML.

[c17]   17.   The method of claim 15 wherein one of the formats is XML.

[c18]   18.   The method of claim 15 wherein one of the formats is WML.

[c19]   19.   The method of claim 11 wherein the request includes a "SWESetMarkup" argument that specifies the client-specified format.

[c20]   20.   A computer-readable medium containing a data structure defining an inbound command to a web server, the data structure comprising:

an execute element having a path attribute indicating a location of an object manager;

a command element nested within the execute element and having a value attribute indicating a name of a command to execute;

one or more argument elements nested within the command element, each argument element having a name attribute indicating a name of an argument for the named command, the one or more argument elements being from a set of argument elements including an argument element for indicating a response markup format, an argument element for indicating whether the response should include user interface elements, and an arguments element identifying a transform to be applied to output.

[c21]   21.   The computer-readable medium of claim 20 wherein the data structure is an XML document.

[c22]   22.   The computer-readable medium of claim 20 wherein zero or more occurrences of the information element are nested within the execute element.

[c23]   23.   The computer-readable medium of claim 20 wherein only one command element is nested within the execute element.

[c24]   24.   A computer-readable medium containing a data structure defining an outbound response sent by a web server, the data structure comprising:

an application element having a name attribute;

a navigation element nested within the application element, having a name attribute, and having sub-elements from a set including a menu

element, tool bar element, screen bar element, thread bar element, view bar element, and page item element; and

one or more elements from the set of elements including a screen element, an applet element, a form element, and a predefined query bar element, the one or more elements being nested within the application element and each having a name attribute.

[c25] 25.   A method in a server system for providing information relating to a business application, the method comprising:

receiving from a client system a request to execute a command of a business application, the request indicating what user interface elements to return along with the data elements as results of the execution;

executing the command of the business application to generate the data elements;

when the request indicates to return some user interface elements, generating the user interface elements to be returned; and

sending to the client system a response that includes the generated user interface elements and the generated data elements; and

when the request indicates to not return user interface elements, sending to the client system a response that includes the generated data elements without user interface elements.

[c26] 26.   The method of claim 25 wherein the request indicates a type of user interface element to return.

[c27] 27.   The method of claim 25 wherein the request indicates a type of user interface element to not return.

[c28]   28.   The method of claim 27 wherein the type of user interface element not to return is navigation data.

[c29]   29.   The method of claim 25 wherein the request includes a "SWEDataOnly" argument.

[c30]   30.   The method of claim 25 wherein the request includes a "SWEExclude" argument.

[c31]   31.   The method of claim 25 wherein the request is to execute a predefined query that was identified to the client system when a request for a list a predefined queries was received from the client system.